



TCH Corridor Management Plan – *Drinkwater to Cowichan Bay Roads*

OPEN HOUSE

Participating Agencies:

*Ministry of Transportation
City of Duncan
Cowichan Tribes
Cowichan Valley Regional District
District of North Cowichan*

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Outline

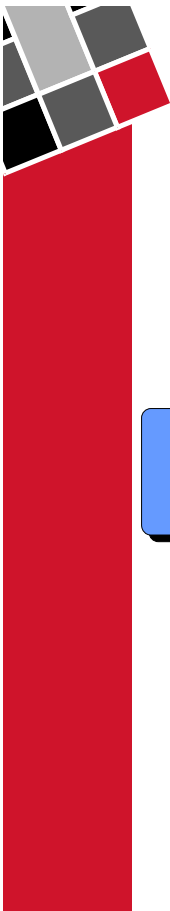
- Study Approach
- Goals & Objectives
- Key Issues (today & long-term)
- Improvement Opportunities
 - Medium-term Strategies
 - Long-term Possibilities
 - Alternative Routes or Bypasses

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Study Approach

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Work Plan



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Agency Involvement

Steering Committee

Ministry of Transportation
Dave Edgar

City of Duncan
Phil Kent, Chair

Cowichan Tribes
Wes Modeste

**Cowichan Valley Regional
District**
John Middleton
Mike Tansley
Loren Duncan

District of North Cowichan
Glen Ridgway

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Agency Involvement

Working Group

City of Duncan
Paul Douville
Trevor Kurshner

BC Hydro
Steve Watson

Cowichan Tribes
Mike Skene
Bill (Chip) Seymour

**Cowichan Valley Regional
District**
Tom Anderson

Ministry of Transportation
Dave Edgar
Bob Webb

**Cowichan Chamber of
Commerce**
Mike Riess
Ray Cadorette

District of North Cowichan
Chris Hall
John MacKay

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Goals & Objectives

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Study Goals

- ✓ Identify feasible medium-term improvements
- ✓ Identify long-term improvements at a high level
- ✓ Identify measures to enhance visual appeal of the corridor
- ✓ Advise on support network improvements
- ✓ Identify access management opportunities

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Corridor Objectives

Mobility – To enhance mobility for highway traffic

Safety – To improve safety for all modes

Alternative Modes – To develop integrated solutions for alternative modes

Land Use, Community & Environment – To ensure that strategies are supportive of surrounding land use patterns and the environments

Affordability – To identify practical and affordable medium-term strategies

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Key Issues *(Today & Long-term)*

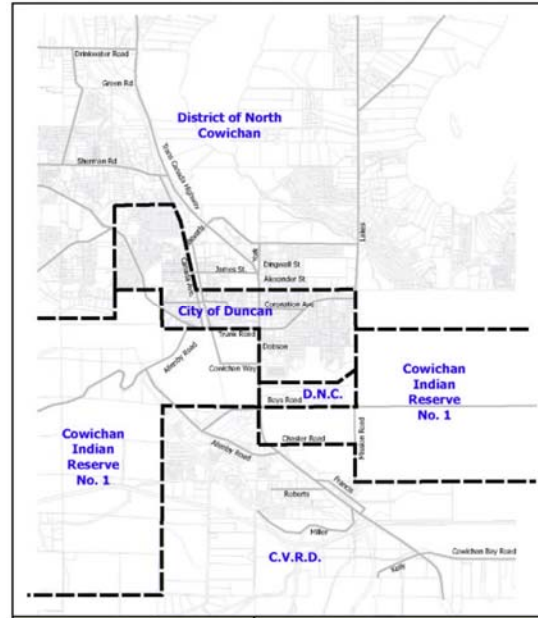
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Where are we today?

Community Overview

- Highway serving local, regional and provincial functions
- Historical population growth of 1.3% per year
- Land use characteristics along corridor inconsistent with highway function



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Where are we today?

The Network

- Limited major north-south roadway system
- Limited support network for access and circulation to local properties



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Where are we today?

The Highway Performance

Considered:

- Intersection & corridor configuration
- Access conditions
- Traffic characteristics
- Mobility
- Safety
- Walking & cycling

Number of Accesses	Minimum Spacing (m)	Maximum Spacing (m)	Average Spacing (m)	Full Access Density (access/km)	Partial Access Density (access/km)	Total Distance (m)
Boys to Cowichan Way						
0	0	0	0		0.00	425
Cowichan Way to Dobson						
6	5	84	25	26.67		225
Dobson to Coronation East Side (West Side)						
7 (7)	3 (3)	58 (56)	30 (33)		21.54 (21.54)	325 (325)
Coronation to James						
18	3	53	12	46.15		390
James to Beverly						
5	33	322	118	6.85		730

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Where are we today?

Future without Highway improvements

- Population growth & development projected (*approximately 1% per year or 2% along highway*)
- Transportation & land use plans & policies impact highway performance
- 20 year forecast conditions will result in significant delays





Key Issues – *Mobility*

Issues	Contributing Factors
Support networks	<p>Few alternatives for existing and future potential land uses along corridor – side-street or rear access</p> <p>Limited continuous north-south roadways to serve inter-municipal travel</p>
Intersection delays	<p>Poor (existing) intersection levels of service at the following locations:</p> <ul style="list-style-type: none"> • Trunk Road • Beverly Street <p>Significant turning movements on and off highway at most intersections</p>
Mid-block delays	<p>Access density between Coronation Avenue and James Street is extremely high</p> <p>Access are closely spaced in several areas of the corridor</p>
Corridor travel times	<p>Forecast growth in traffic along the Highway will increase travel times through the study area by 150%</p>

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Key Issues – *Safety*

Issues	Contributing Factors
Corridor safety	<p>Collision rates in the urban sections of the highway are well above the provincial average.</p> <p>Lack of transition from expressway to urban area for through traffic likely contributing toward higher than average collision patterns.</p> <p>Mixture of through traffic and local traffic traveling within communities increases conflicts.</p> <p>Number and density of site accesses along corridor.</p>
Intersection safety	<p>Several intersections along the corridor support highest traffic collisions:</p> <ul style="list-style-type: none"> • Coronation Avenue • Trunk Road • James Street • Boys Road

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Key Issues

Pedestrians & Cyclists

Issues	Contributing Factors
Comfort	<p>Growing number of pedestrians along highway.</p> <p>Growing number of pedestrians and cyclists crossing highway.</p> <p>Limited separation between sidewalks and highway.</p> <p>Utility poles located in sidewalk areas.</p> <p>No pedestrian and cyclist refuge areas crossing the highway and side streets.</p>

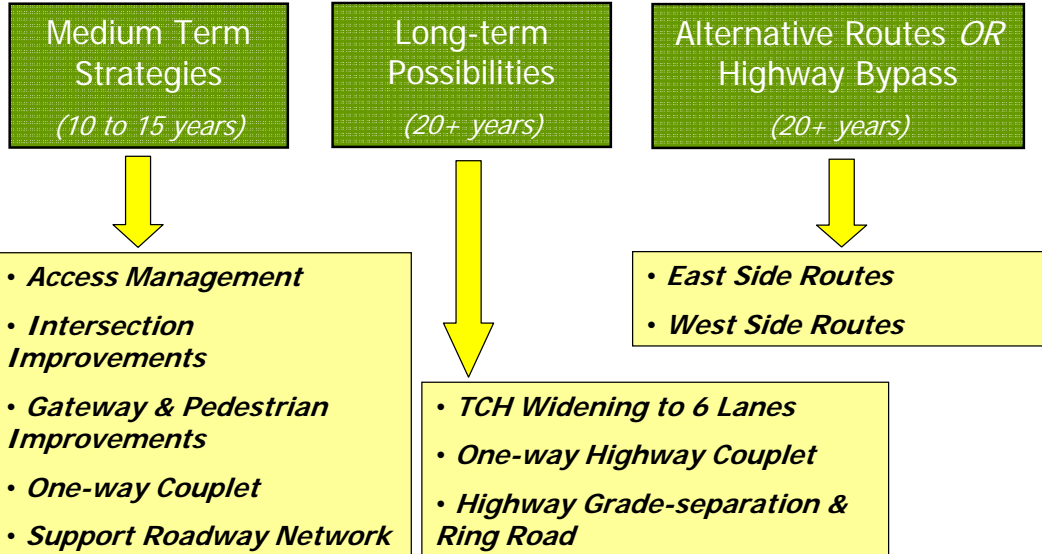
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Improvement Opportunities

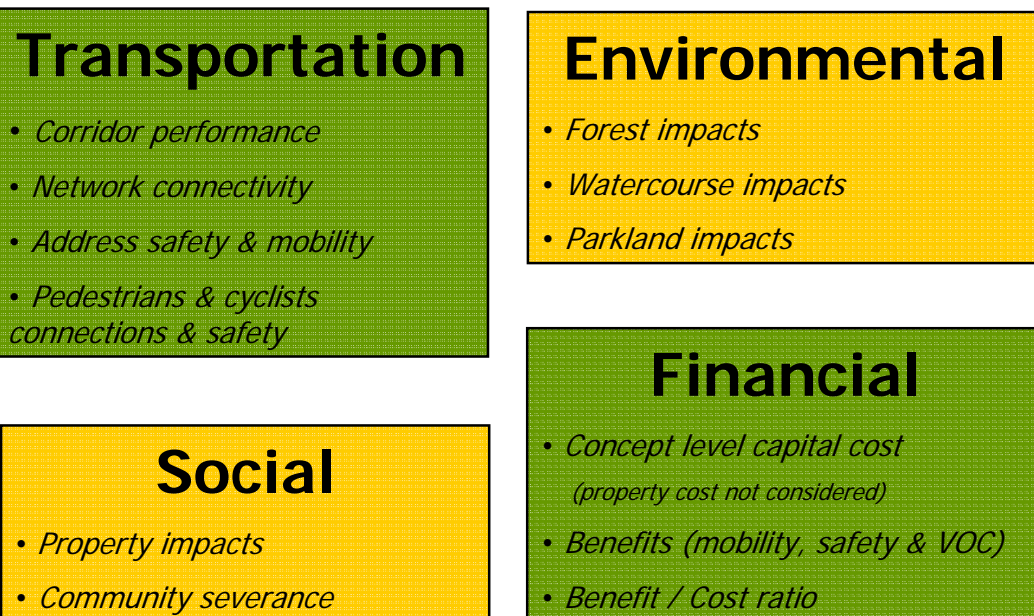
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Range of Improvements



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Evaluation Framework



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Medium-term Strategies

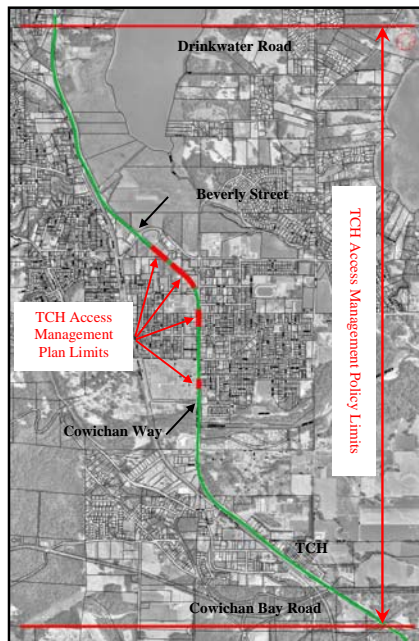
NOTE:

Intersection improvement strategies require significant local area consultation, planning, preservation (of right-of-way) & staging before being advanced by municipalities and the Ministry.

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Medium-term Strategies *Access Management*



Key Features

Policies to manage additional access for entire corridor suited to urban arterial standards

Landscape median islands to replace 2-way left-turn lanes

Local roadway network and lanes to support property access and inter-municipal travel

Reciprocal access agreements between adjacent properties to access support roads

Impacts & Benefits

Reduced collisions

Modest reduction in travel delays

Low cost strategies

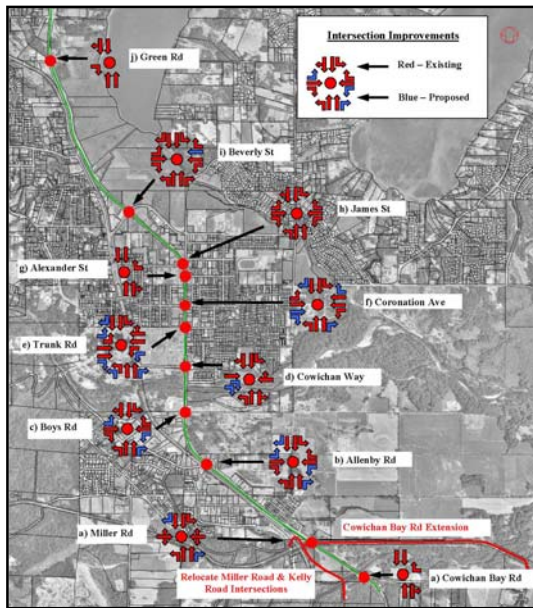
Controlled access to adjacent properties

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Medium-term Strategies

Intersection Improvements



Key Features

- Provision of signals & timing improvements*
- Additional turn lanes*
- Turn restrictions*
- Modified intersections and support road connections*

Impacts & Benefits

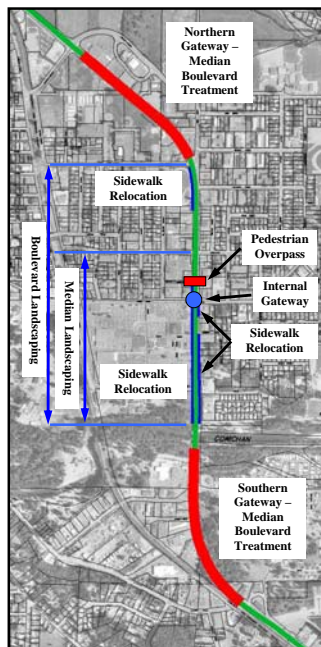
- Reduced collisions at most key intersections*
- Reduced delays in medium-term, however long-term delays remain.*
- Enhanced access to adjacent road networks*
- Localized property impacts to accommodate turn lanes*

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Medium-term Strategies

Gateway & Pedestrian Improvements



Key Features

- "Southern Gateway" treatment & landscaped median north of Allenby Road*
- Northern "Gateway" treatment & landscaped median south of Beverly*
- Pedestrian improvements through widened sidewalks and boulevard separation. Consider pedestrian overpass in core area (Coronation through Trunk)*
- Internal gateways as per Downtown Revitalization Strategy*
- Further highway beautification through median and boulevard landscaping treatments.*

Impacts & Benefits

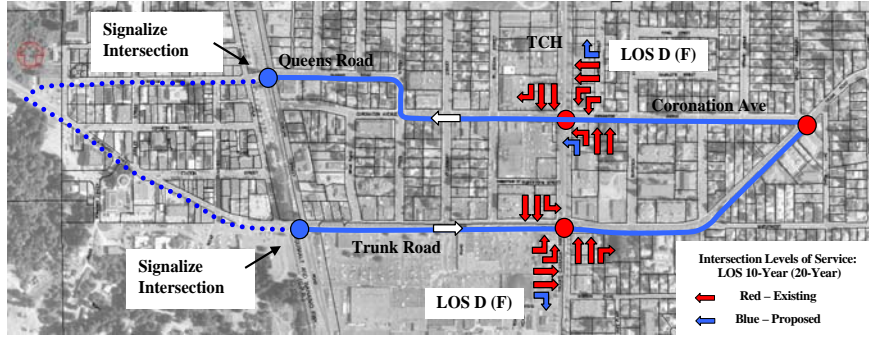
- Increase driver awareness in changes from rural to urban conditions to enhance safety*
- Improve highway aesthetics*
- Accommodates growing pedestrian and cyclists demands along and crossing the corridor.*

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Medium-term Strategies

Trunk Road & Coronation Avenue One-way Couplet



Key Features

One-way eastbound travel along Trunk and westbound along Coronation /Queens

Two travel lanes in each direction

Turn lanes at intersection with Highway

Signalization intersections of Queens/Duncan and Trunk/Duncan

Potential to extend one-way further west to Ingram / Government

Impacts & Benefits

Minor access and circulation impacts

Impacts commercial properties at Highway intersections

Significantly reduces intersection conflicts and time savings on TCH

Reduced delays in medium-term, however long-term delays remain.

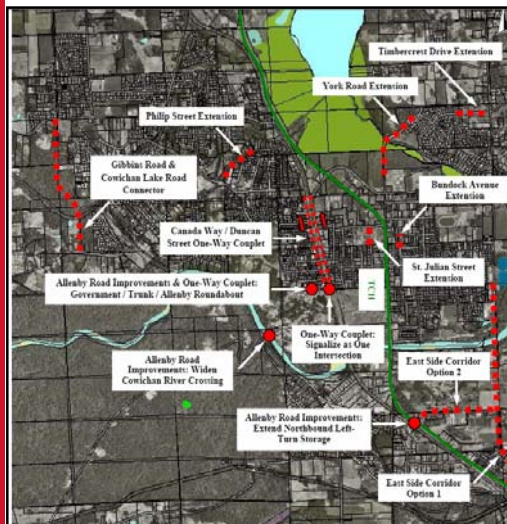
No environmental impacts

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Medium-term Strategies

Local Area Support Roadways



Key Features

York Road & Timbercrest Drive Extensions

Gibbins Road & Cowichan Lake Road Connector

Philip Street Extension

Allenby Road Improvements

Canada Avenue / Duncan Street One-way Couplet

St. Julian Street Extension to James

Bundock Avenue Extension to Alexander

East Side Corridor Options connecting Lakes Road, Mission Road and across Cowichan River (optional routes)

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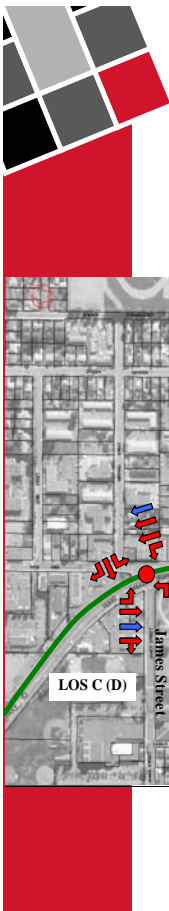


Long-term Strategies

NOTE:

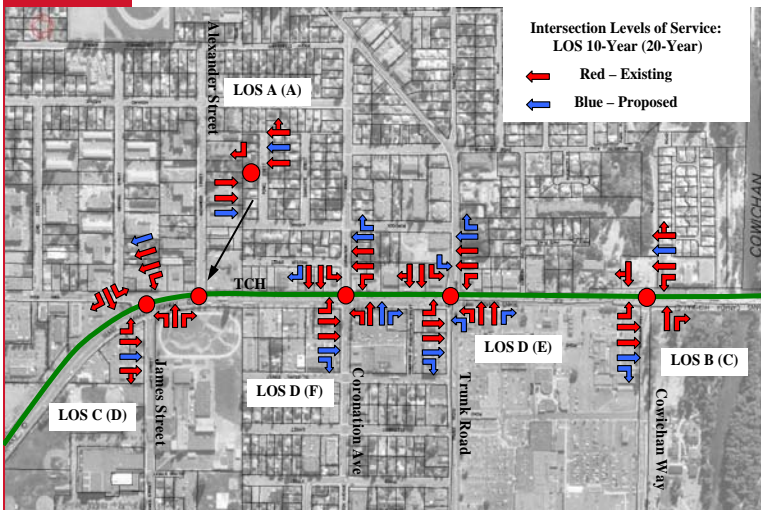
All long-term possibilities require significant local area consultation, study of alternative alignments, planning, preservation (of right-of-way) & staging before being advanced by municipalities and the Ministry.

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Long-term Possibilities

Trans Canada Highway Widening



Key Features

Widen Highway from 4 to 6 lanes from Cowichan Way to James Street

Provision of turn lanes at all key signalized intersections

Widening of some cross-streets immediately east and west of the highway

Impacts & Benefits

Reduces long-term delays at all key intersections

Reduces collisions with additional turn lanes at key intersections

Impacts several commercial properties

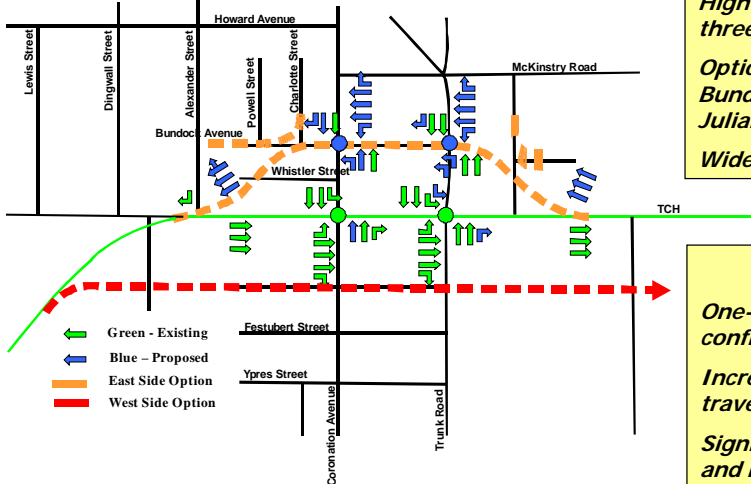
Enhanced travel benefits for highway

High capital and property cost

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Long-term Possibilities

One-Way Highway Couplet



Key Features

Separate northbound and southbound Highway corridors as one-way streets, three lanes in each direction

Optional routes for northbound along Bundock alignment OR southbound along Julian.

Widen all cross-streets to 4 lanes

Impacts & Benefits

One-way system significantly reduces conflicts at all intersections on Highway

Increased capacity to support long-term travel

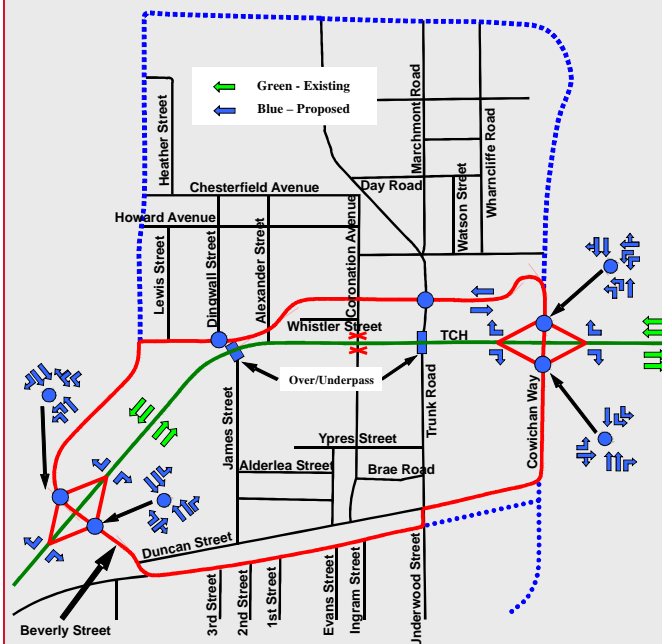
Significant impact on several commercial and residential properties

High capital and property cost

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Long-term Possibilities

Highway Grade-Separated & Ring Road



Features

Change Highway into 4 lane with highway grade-separated interchanges nearby Cowichan Way and Beverly respectively

Overpasses OR underpasses across highway at Trunk Road & James Street

Closure of other cross street connections and accesses to Highway

Potential "ring road" system east and west of Highway to support grade-separation – along Bundock, Canada Way/Duncan and Lakes Road

Impacts & Benefits

Significantly reduce long-term delays through Duncan & support local cross-street travel along key corridors

Significant commercial and residential property impacts

Potential environmental impacts with extension of Cowichan Way

Reduced collisions with intersection modifications & access restrictions



Consideration of Alternative Local Connections OR Highway Bypass Routes

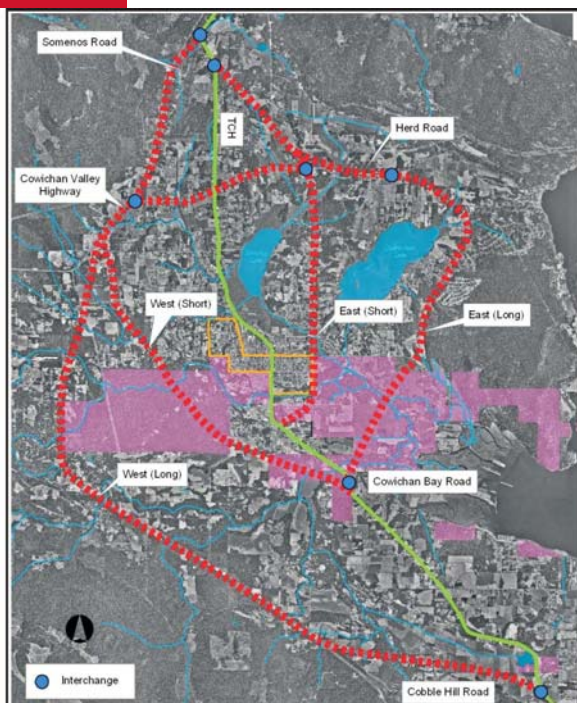
NOTE:

Alternative routes require significant local area consultation, study of alternative alignments, planning, preservation (of right-of-way) & staging before being advanced by municipalities and the Ministry.

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Alternate Local OR Highway Routes (No Alignment Determined)



Potential East Side Routes

Short route of approximately 11 km, extends north from the Highway across Cowichan River to Lakes Road, continues north between Somenos Lake and Quamichan Lake and connects with Highway near Somenos Road

Long route of approximately 24.5 km, extends north from the Highway across the Cowichan River to meet Maple Bay Road, and connects with the Highway along Mays Road or Herd Road

Potential West Side Routes

Short route of approximately 15 km, extends north south of Cowichan Bay Road, across Cowichan River, connects Cowichan Valley Highway and connects to the Trans Canada Highway

Long route of approximately 24 km, extends north from Cobble Hill Road through to Cowichan Valley Highway and connects to the Trans Canada Highway, or continues north along Somenos Road

Benefits/Impacts

- Modest benefits as a highway bypass
- Portion of routes effective in serving inter-municipal travel
- Some impacts on ALR, environmentally sensitive areas and private property
- Significant cost to construct complete bypass routes



Where to from here?

Medium Term Strategies

- Integrated land use and transportation plans
- Managing existing corridor through access management
- Integration with existing highway programs such as road rehabilitation
- Partnerships and funding with local agencies and property owners through redevelopment may advance some projects
- Consider long-term directions to preserve rights-of-way through redevelopment

Long-term Possibilities OR

Alternative Routes /Highway Bypass

- Region-wide direction on transportation improvement plans and priorities (*Highway & local roads*)
- Community consultation on long-term direction for highway improvements
- Consider right-of-way dedication for long-term highway improvements
- Establish alternative route(s) as a municipal corridor

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Thank-you for coming and please
take a moment to complete the
questionnaire.

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District of North Cowichan

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